

Boston University Management Resource Project
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INTRODUCTION

The techniques of management practices by the National Aeronautics and Space Administration and many of its suppliers have deeply influenced, if not actually caused, the present surge of interest in "systems concepts" as applied to management. Under the terms of NASA's grant to the Boston University College of Business Administration, the College has undertaken organized study of the impact of these concepts in management and the teaching of management today. The project is thus continuing and substantially expanding work done at the College during 1965 and 1966.

The continuation of the effort here is particularly appropriate. The College of Business Administration is a moderate sized school of business within a university committed to liberal education and, as such, is representative of the great majority of the nation's schools of business. The results of this project will thus be readily adaptable for use in the many schools of business which are similarly oriented.

OBJECTIVES

The NASA/BU Management Resource Project has as its major task the documentation of the impact of systems concepts on management. As the business community begins to feel the full force of these new management ideas, documentation of this "state of art" and coordination into a consistent information source becomes increasingly critical.

Especially critical is the need to identify areas where further study could be immediately useful.

ACTIVITY TO DATE

The following outline has been developed for organization of materials as well as for the ongoing seminar now being conducted at the Graduate School of Business at B.U.

- I. Introduction to the systems concept.
 - A. The systems approach.
 - B. Systems engineering.
 - C. Systems analysis.
 - D. Systems management.
- II. The systems concept in historical and conceptual perspective.
- III. The impact of the systems management concept on various functions (sub-systems) of business.
 - A. Physical distribution.
 - B. Marketing.
 - C. Production.
 - D. Research and development.
 - E. Management information.
 - F. Other: packaging, exploration, etc.
- IV. Systems concepts in the management of the multi-national business.
- V. Systems concepts in public administration (non-industrial organizations).
 - A. Governmental agencies (public health, medicine, etc.)
 - B. Government (federal, state, local.)
 - C. Private, non-profit organizations.
 - D. Political, social and economic development.
- VI. Manpower planning, development and education.
- VII. The impact of the systems approach on management.
 - A. Organizational
 1. Top management structure (e.g., the development of the multiple executive such as the "office of the administrator" at NASA).

2. Integration and balance between headquarters and field organizations; centralization-decentralization balance, (e.g., the NASA program and project assignment.)
 - B. Techniques (e.g., PERT as a measurement and control device.)
 - C. Decision-making.
- VIII. Practical consideration in applying the systems approach.

Actual project output will be organized according to the above outline and will take the following form:

1. Source material: published and unpublished material is being and will continue to be collected in triplicate; one set of this material will be submitted to NASA as part of the project's output.
2. Bibliography: this will be much broader than the source material, and will, of course, include that material. This bibliography will provide a broader base for study in depth of the topics described in the outline.
3. Commentary: a written document which is being prepared from a course (seminar) now being conducted at the College of Business Administration by adjunct Professor Harold A. Wolff. This seminar -- "The Impact of the Systems Approach on Management Decision-Making" -- was first offered by Mr. Wolff during the spring 1966 semester. The written document will be produced from tapes of this year's seminars, transcripts of the 1966 seminars, and material from (1) above where appropriate. It is expected that this commentary will be suitable for use by other graduate schools of business in a similar program of study.

During the period September 1, 1966 through January 20, 1967, activity was largely being carried on by the New York group, since until receipt of the contract here (on January 20, 1967), the B.U. group's work on the project was slight. Immediately upon receipt of the contract, the Boston group was able to begin activity with the project and did so.

In addition to the development of the outline which is being followed in the seminar and which will be followed in the organization of the project output, the search for source material is well underway.

More than 25 magazines and journals are being screened for material; management texts are being examined; a member of the project team has attended several relevant professional meetings. An important source of information is just now being developed: team members are planning a series of personal interviews with persons who will be able to contribute valuable information concerning the "state of art." This will be concurrent with the search for additional research reports, literature, etc.

Experience is now making apparent that teachers and practitioners of management will find increasingly difficult the task of bringing themselves up-to-date on the impact of systems concepts on management and management training. The material now being examined and coordinated is being brought together from a variety of sources, and only through concerted effort is being integrated into a single, accessible source of information on current "state of the art."

Unless such a compilation can be continued in a systematic fashion, the possible contribution of the nation's space efforts to management could be seriously limited. If the research techniques developed in this project prove as effective as we expect, continuation of this effort by maintaining and expanding the current project, should be given serious consideration.